

Warm-up

$$0 = x^3 - x$$

7-2 Exponential functions

$$y = ab^{kx}$$

*You will now study the difference
between the change of a , b , and k .*

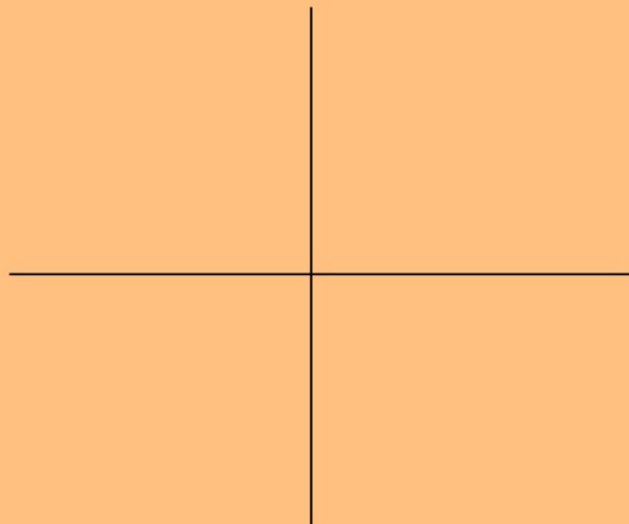
Using a graphing calculator, graph:

1) $y = 2^x$

2) $y = 4^x$

3) $y = 7^x$

Make a sketch of all graphs on the same coordinate plane. Make a one sentence statement to describe the change, and it's effect on the graph.

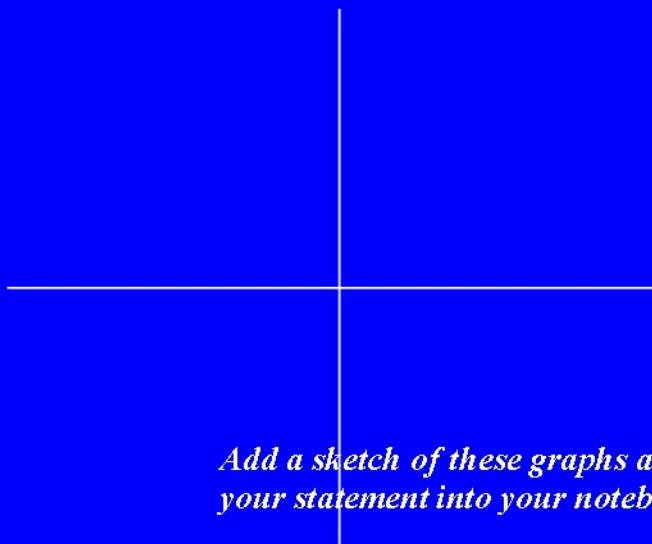


Graph the set of equations and make one statement to describe the change and effect on the graph.

1) $y = .5^x$

2) $y = .25^x$

3) $y = .15^x$



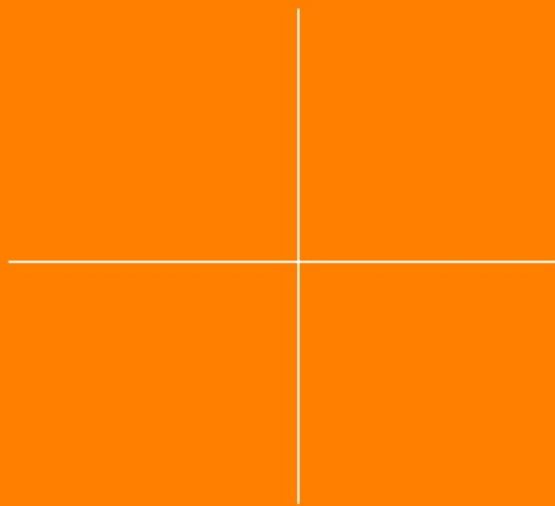
Add a sketch of these graphs and your statement into your notebook.

Now graph this set:

1) $y = 10 (2)^x$

2) $y = 6 (2)^x$

3) $y = 2 (2)^x$



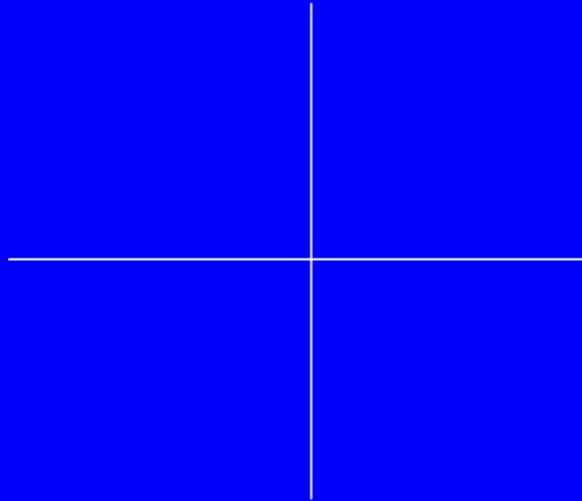
*Of course, sketch the graph and make a statement
into your notebook*

Your doing great! Last set...

1) $y = 2^{2x}$

2) $y = 2^{3x}$

3) $y = 2^{4x}$



Notebook— and statement.

Ex 1

Write an equation for $y = ab^x$ with a base of 2 whose graph passes through the point (3, 4). Then check with graph.

Final answer??...

$$y = ___ 2^x$$

Hint??

base = 2, ordered pair of (3, 4) always stands for (x, y)



Ex 2

Try with base 4, and through (2, 3)

$$y = ____ 4^x$$

Ex 3

Base= Your choice

Pt= (your face partner picks one)

Stop!!!

If you have any questions, ask. NOW!!!

Homework

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